Figure 1A

No.	Kinase-Subclass	Family	Sub	Protein	αD sequence
1	Serine/Threonine	RAF		c-Raf	TQWCEGSSLYKHLHVQETKF
2	Serine/Threonine	RAF		Araf	TQWCEGSSLYHHLHVADTRF
3	Serine/Threonine	RAF		Braf	TQWCEGSSLYHHLHIIETKF
4	Serine/Threonine	CAPK		cAPKa	MEYVPGGEMFSHLRRIGRF
4	Serine/Threonine	CAPK		cAPKb	MEYVPGGEMFSHLRRIGRF
5	Serine/Threonine	CAPK		cAPKg	MEYVPGGEMFSRLQRVGRF
6	Serine/Threonine	PKC		PKCa	MEYVNGGDLMYHIQQVGKF
7	Serine/Threonine	PKC		PKCb	MEYVNGGDLMYHIQQVGRF
8	Serine/Threonine	PKC		PKCg	MEYVTGGDLMYHIQQLGKF
9	Serine/Threonine	PKC		PKCd	MEFLNGGDLMFHIQDKGRF
10	Serine/Threonine	PKC		PKCe	MEYVNGGDLMFQIQRSRKF
11	Serine/Threonine	PKC		PKCet	MEFVNGGDLMFHIQKSRRF
12	Serine/Threonine	PKC		PKCth	MEYLNGGDLMYHIQSCHKF

Figure 1B

13	Serine/Threonine	Akt/PKB		Akt1/Raca	MEYANGGELFFHLSRERVF
13	Serine/Threonine	Akt/PKB		Akt2/Racb	MEYANGGELFFHLSRERVF
14	Serine/Threonine	GSK3		GSK3a	LEYVPETVYRVARHFTKAK LII
15	Serine/Threonine	GSK3		GSK3b	LDYVPETVYRVARHYSRAK QTL
16	Serine/Threonine	CK II		CK IIa	FEHVNNTDFKQLYQTL
17	Serine/Threonine	CK II		CK IIa'	FEYINNTDFKQLYQIL
18	Serine/Threonine	bARK1,2		bARK1	LDLMNGGDLHYHLSQHGV F
18	Serine/Threonine	bARK1,2		bARK2	LDLMNGGDLHYHLSQHGV F
19	Serine/Threonine	GRK1		GRK1	MTIMNGGDIRYHIYNVDED NPGF
20	Serine/Threonine	GRK4		GRK4	LTIMNGGDLKFHIYNLGNPG F
21	Serine/Threonine	GRK5		GRK5	LTIMNGGDLKFHIYNMGNP GF
22	Serine/Threonine	GRK6		GRK6	LTLMNGGDLKFHIYHMGQA GF

Figure 1C

23	Serine/Threonine	CaMK		CaMK I	MQLVSGGELFDRIVEKGGY
24	Serine/Threonine	CaMK		CaMK IIa	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IIb	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IIg	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IId	FDLVTGGELFEDIVAREYY
25	Serine/Threonine	POLO		Plk	LELCRRRSLLELHKRRKAL
26	Serine/Threonine	POLO		Plx1	LELCRRRSLLELHKRRKAV
27	Serine/Threonine	POLO		polo	LELCKKRSMMELHKRRKSI
28	Serine/Threonine	POLO		SNK	LEYCSRRSMAHILKARKVL
29	Serine/Threonine	POLO		CDC5	LEICPNGSLMELLKRRKVL
30	Serine/Threonine	POLO		Sak	LEMCHNGEMNRYLKNRVK PF
31	Serine/Threonine	POLO		Prk	LELCSRKSLAHIWKARHTL

Figure 1D

31	Serine/Threonine	POLO		Fnk	LELCSRKSLAHIWKARHTL
32	Serine/Threonine	POLO		Plo1	LELCEHKSLMELLRKRKQL
33	Serine/Threonine	MARK/p78		MARK1	MEYASGGEVFDYLVAHGRM
33	Serine/Threonine	MARK/p78		MARK2	MEYASGGEVFDYLVAHGRM
34	Serine/Threonine	MARK/p78		P78	MEYASGGKVFDYLVAHGRM
35	Serine/Threonine	CDK		CDK2	FEFLHQDLKKFMDASALTGI
36	Serine/Threonine	CDK		CDK4	FEHVDQDLRTYLDKAPPPGL
37	Serine/Threonine	CDK		CDK6	FEHVDQDLTTYLDKVPEPGV
38	Tyrosine	SRC		c-Src	TEYMSKGSLLDFLKGETGKYL
39	Tyrosine	SRC		c-Yes	TEFMSKGSLLDFLKEGDGKYL
40	Tyrosine	SRC		Fyn	TEYMNKGSLLDFLKDGEGRAL
41	Tyrosine	SRC		c-Fgr	TEFMCHGSLLDFLKNPEGQDL

Figure 1E

42	Tyrosine	LYN/HCK		Lyn	TEYMAKGSLLDFLKSDEGGKV
43	Tyrosine	LYN/HCK		Hck	TEFMAKGSLLDFLKSDEGSKQ
44	Tyrosine	LCK		Lck	TEYMENGSLVDFLKTPSGIKL
45	Tyrosine	CSK		Csk	TEYMAKGSLVDYLRSRGRSVL
46	Tyrosine	CSK		Matk	MEHVSKGNLVNFLRTRGRALV
47	Tyrosine	FAK		Fak	MELCTLGELRSFLQVRKYSL
48	Tyrosine	ABL		c-Abl	TEFMTYGNLLDYLRECNRQEV
49	Tyrosine	ENDOTHELIAL	Tie/Tek	Tie	IEYAPYGNLLDFLRKSRVLETDPAFAREHGTASTL
50	Tyrosine	ENDOTHELIAL	Tie/Tek	Tek	IEYAPHGNLLDFLRKSRVLETDPAFAIANSTASTL
51	Tyrosine	ENDOTHELIAL	FGFR	Flg	VEYASKGNLREYLQARRPPGLEYCYNPSHNPEEQL
52	Tyrosine	ENDOTHELIAL	FGFR	Bek	VEYASKGNLREYLRARRPPGMEYSYDINRVPEEQM
53	Tyrosine	ENDOTHELIAL	FGFR	FGFR-3	VEYAAKGNLREFLRARRPPGLDYSFDTCKPPEEQL

Figure 1F

54	Tyrosine	ENDOTHELIAL	FGFR	FGFR-4	VECAAKGNLREFLRARRPPGPDLSPDGPRSSEGPL
55	Tyrosine	ENDOTHELIAL	PDGFR	PDGFR-a	TEYCFYGDLVNYLHKNRDSFLSHHPEKPKKELDIFGLNPA
56	Tyrosine	ENDOTHELIAL	PDGFR	PDGFR-b	TEYCRYGDLVDYLHRNKHTFLQHHSDKRRPPSAELYSNAL
57	Tyrosine	ENDOTHELIAL	Flt/Flk	Flt1	VEYCKYGNLSNYLKSKRDLFFLNKDAALHMEPKKEKMEPG
58	Tyrosine	ENDOTHELIAL	Flt/Flk	Flt4	VEFCKYGNLSNFLRAKRDAFSPCAEKSPEQRGRFRAMVEL
59	Tyrosine	ENDOTHELIAL	Flt/Flk	Flk1	VEFSKFGNLSTYLRGKRNEFVPYKSKGARFRQGKDYVGEL
60	Tyrosine	HGFR		c-Met	LPYMKHGDLRNFIRNETHNP
61	Tyrosine	HGFR		c-Sea	LPYMRHGDLRHFIRAQERSP
62	Tyrosine	HGFR		Ron	LPYMCHGDLLQFIRSPQRNP
63	Tyrosine	EGFR		EGFR	TQLMPFGCLLDYVREHKDNI
64	Tyrosine	EGFR		ErbB2	TQLMPYGCLLDHVRENRGRL
65	Tyrosine	EGFR		ErbB3	TQYLPLGSLLDHVRQHRGAL

Figure 1G

66	Tyrosine	EGFR		ErbB4	TQLMPHGCLLEYVHEHKDN I
67	Tyrosine	RET		Ret	VEYAKYGSLRGFLRESRKV GPGYLGSGGSRNSSSLDHPD ERAL
68	Tyrosine	TRK-NGFR		Trk - NGFR	FEYMRHGDLNRFLRSHGPD AKLLAGGEDVAPGPL
69	Tyrosine	TRK-NGFR		TrkB	FEYMKHGDLNKFLRAHGPD AVLMAEGNPPTEL
70	Tyrosine	TRK-NGFR		TrkC	FEYMKHGDLNKFLRAHGPD AMILVDGQPRQAKGEL
71	Tyrosine	SYK/ZAP70		Syk	MEMAELGPLNKYLQQNRH V
72	Tyrosine	SYK/ZAP70		Zap70	MEMAGGGPLHKFLVGKRE EI
73	Tyrosine	TYK/JAK		Jak1	MEFLPSGSLKEYLPKNKNKI
74	Tyrosine	TYK/JAK		Jak2	MEYLPYGSLRDYLQKHKER I
75	Tyrosine	TYK/JAK		Jak3	MEYLPSGCLRDFLQRHRAR L
76	Tyrosine	TYK/JAK		Tyk2	MEYVPLGSLRDYLPRHSI
77	Serine/Threonine	IAK		Iak1	LEYAPLGTVYRELQKLSKF

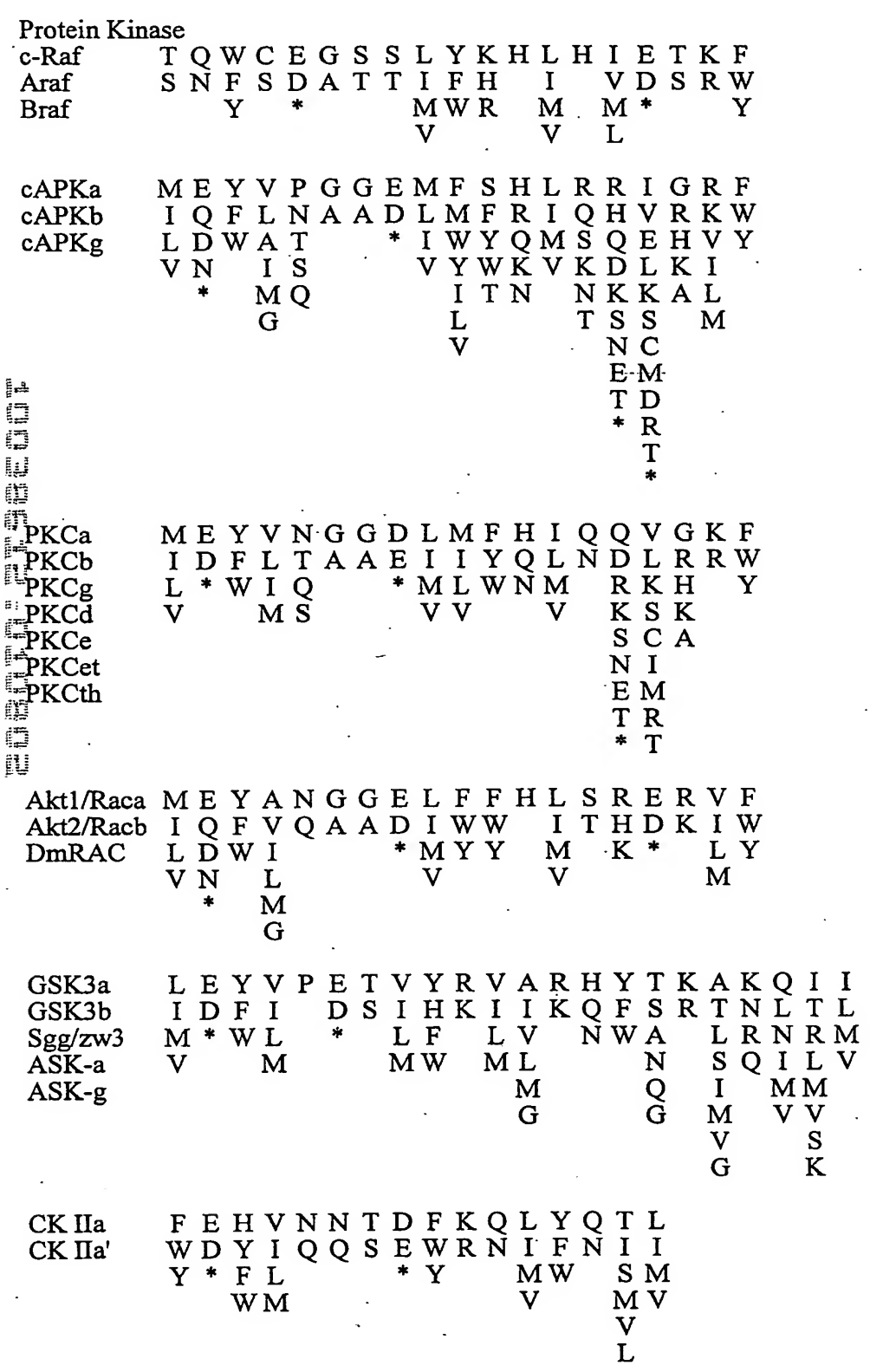
Figure 1H

78	Serine/Threonine	CHK		Chk1	LEYCSGGELFDRIEPDIGM
79	Serine/Threonine	IKK		IKK-1	MEYCSGGDLRKLLNKPENCCGL
80	Serine/Threonine	IKK		IKK-2	MEYCQGGDLRKYLNQFENCCGL
81	Serine/Threonine	DAPK		DAPK	LELVAGGELFDFLAEKESL
82	Tyrosine	IRK		IRK	MELMAHGDLKSYLRSLRPEAENNPGRPPPTL
83	Serine/Threonine	Activin/TGFbR	TGFbR	TGFbRII	TAFHAKGNLQEYLTRHVI
84	Serine/Threonine	Activin/TGFbR	ACTR	ACTRIIA	TAFHEKGSLSDFLKANVV
85	Serine/Threonine	Activin/TGFbR	ACTR	ACTRIIB	TAFHDKGSLTDYLKGNII
86	Serine/Threonine	Activin/TGFbR	ALK	ALK1	THYHEHGSLYDFLQRQTL
87	Serine/Threonine	Activin/TGFbR	ALK	ALK2	THYHEMGSLYDYLQLTTL
88	Serine/Threonine	Activin/TGFbR	ALK	ALK3	TDYHENGSLYDFLKCATL
89	Serine/Threonine	Activin/TGFbR	ALK	ALK4	SDYHEHGSLFDYLNRYTV

Figure 1I

89	Serine/Threonine	Activin/TGFbR	ALK	ALK5	SDYHEHGSLFDYLNRYTV
90	Serine/Threonine	Activin/TGFbR	ALK	ALK6	TDYHENGSLYDYLKSTTL
91	Tyrosine	DDR		DDR1	TDYMENGDLNQFLSAHQL
92	Tyrosine	DDR		DDR2	TEYMENGDLNQFLSRHEP
93	Serine/Threonine	ILK		ILK	THWMPYGSLYNVLHEGTNFVV
94	Tyrosine	MAPK		JNK	MELMDANLCQVIQMEL

Figure 2A



Protein Kinase																				
c-Raf	T	Q	W	C	E	G	S	S	L	Y	K	H	L	H	I	E	T	K	F
Araf	S	N	F	S	D	A	T	T	I	F	H		I		V	D	S	S	R	W
Braf			Y		*				M	W	R		M		M	*				Y
									V				V		L					
cAPKa	M	E	Y	V	P	G	G	E	M	F	S	H	L	R	R	I	G	R	F
cAPKb	I	Q	F	L	N	A	A	D	L	M	F	R	I	Q	H	V	R	K	W
cAPKg	L	D	W	A	T			*	I	W	Y	Q	M	S	Q	E	H	V	Y
	V	N		I	S				V	Y	W	K	V	K	D	L	K	I		
		*		M	Q					I	T	N		N	K	K	A	L	
				G						L				T	S	S		M	
										V					N	C			
															E	M			
															T	D			
															*	R			
																T			
																*			
PKCa	M	E	Y	V	N	G	G	D	L	M	F	H	I	Q	Q	V	G	K	F
PKCb	I	D	F	L	T	A	A	E	I	I	Y	Q	L	N	D	L	R	R	W
PKCg	L	*	W	I	Q			*	M	L	W	N	M		R	K	H		Y
PKCd	V			M	S				V	V			V		K	S	K		
PKCe															S	C	A		
PKCet															N	I			
PKCth															E	M			
															T	R			
															*	T			
Akt1/Raca	M	E	Y	A	N	G	G	E	L	F	F	H	L	S	R	E	R	V	F
Akt2/Racb	I	Q	F	V	Q	A	A	D	I	W	W		I	T	H	D	K	I	W
DmRAC	L	D	W	I				*	M	Y	Y		M		K	*		L	Y
	V	N		L					V				V					M	
		*		M															
				G															
GSK3a	L	E	Y	V	P	E	T	V	Y	R	V	A	R	H	Y	T	K	A	K	Q	I	I
GSK3b	I	D	F	I		D	S	I	H	K	I	I	K	Q	F	S	R	T	N	L	T	L
Sgg/zw3	M	*	W	L		*		L	F		L	V		N	W	A		L	R	N	R	M
ASK-a	V			M				M	W		M	L				N		S	Q	I	L	V
ASK-g												M				Q		I		M	M	
												G				G		M		V	V	
																		V		S		
																		G		K		
CK IIa	F	E	H	V	N	N	T	D	F	K	Q	L	Y	Q	T	L						
CK IIa'	W	D	Y	I	Q	Q	S	E	W	R	N	I	F	N	I	I						
	Y	*	F	L				*	Y			M	W		S	M						
			W	M								V			M	V						
															V							
															L							

Figure 2B

bARK1	L	D	L	M	N	G	G	D	L	H	Y	H	L	S	Q	H	G	V	F	N	P	G	F
bARK2	M	T	I	I	Q	A	A	E	I	R	F		I	Y	N	V	D	E	D	G	F	A	W
GRK1	I	E	M	L				*	M	K	W		M	T	H	L	E	N	P	Q	W		Y
GRK4	V	S	V	V					V				V	F		M	A	Q	A	A	Y		
GRK5		*												W		I	*	I	W				
GRK6																		L	Y				
																		M	E				
																		D	G				
																		*	*				

CaMK I	M	Q	L	V	S	G	G	E	L	F	D	R	I	V	E	K	G	G	Y
CaMK IIa	F	D	I	I	T	A	A	D	I	W	E	D	L	I	A	R	E	Y	F
CaMK IIb	W	N	M	L				*	M	Y	*	K	M	L	D		D	F	W
CaMK IIg	Y	E	V	M					V			E	V	M	G		A	W	
CaMK IId	I	*										*			*		*	A	
	L																		
	V																		

Plk	L	E	L	C	R	R	R	S	L	L	E	L	H	K	R	R	K	A	L	F
Plx1	I	D	I	S	K	K	G	E	M	M	A	I	L	R	A		H	S	V	W
Polo	M	*	Y		S	N	K	D	I	N	R	Y	W		N		V	V	I	Y
SNK	V		M		P	H	A	T	V	A	H	M	I		K		R	K	P	
CDC5			V		H	Q		*		I	D	V	M		Q		I	T	M	
Sak			F		E					V	K	F	V		G		L	Q		
Prk			W		T					Q	G	W	F				M	T		
Fnk					D					G	*		Y					I		
Plo1					*													L		
																		M		
																		R		
																		N		
																		G		

P78	M	E	Y	A	S	G	G	E	V	F	D	Y	L	V	A	H	G	R	M
MARK1	L	D	F	G	T	A	A	K	I	W	E	F	I	I	G		A	K	I
MARK2	I	*	W					D	L	Y	*	W	M	L					L
Par1	V							R	M				V	M					V
								*											

CDK2	F	E	F	L	H	Q	D	L	K	K	F	M	D	A	V	A	L	T	G	I
CDK4	W	D	H	V	D	N	E	I	R	T	Y	L	E	K	S	P	P	P	A	L
CDK6	Y	*	W	I	E		*	M	T	R	W	I	*	R	A	G	E	S		V
			Y	M	*			V	S	S		V		G	I		I			M
															L		M			
															M		V			
															T		D			
																	*			

Figure 2C

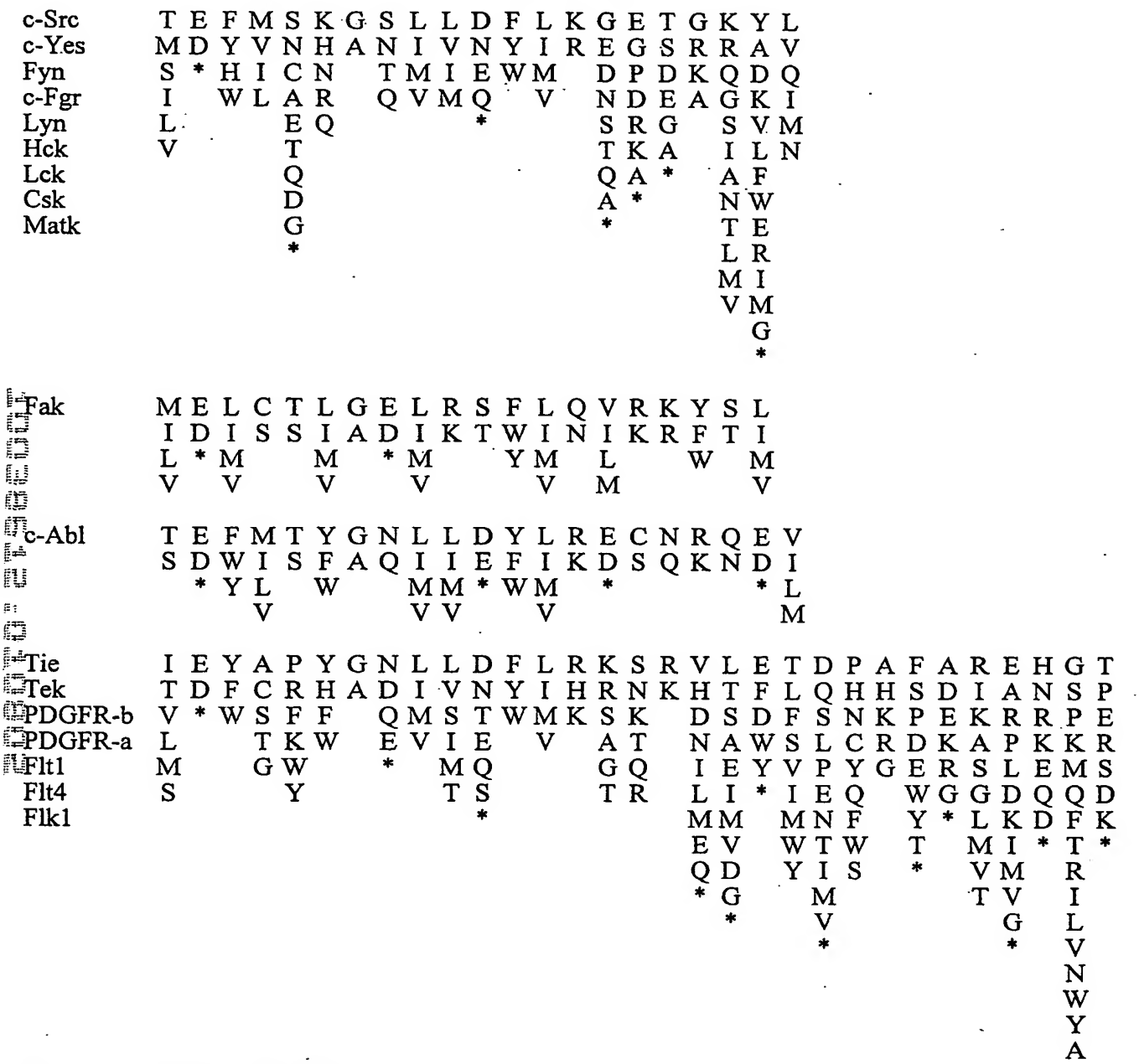

c-Src
c-Yes
Fyn
c-Fgr
Lyn
Hck
Lck
Csk
Matk
Fak
c-Abl
Tie
Tek
PDGFR-b
PDGFR-a
Flt1
Flt4
Flk1

Figure 2D

Flg	V	E	Y	A	S	K	G	N	L	R	E	Y	L	Q	A	R	R	P	P	G	L	E	Y	C	Y	N	P	S	H	N	P
Bek	I	D	C	G	A	R	A	Q	I	K	D	F	I	R	G	K	K			A	M	D	L	S	F	D	I	N	R	V	S
FGFR-3	L	*	F		T				M		*	W	M	N							P	*	F	T	P	Q	T	C	K	P	T
FGFR-4	M		W		G				V				V	K							I		W		W	E	G	P		S	
			S																		V		I			*	L	T		Q	
																							M				M	Q		I	
																							V				V			L	
																											S			M	
																											A			T	

Flg	E	Q	L
Bek	G	P	M
FGFR-3	D	N	I
FGFR-4	A		V
	*		

c-Met	L	P	Y	M	K	H	G	D	L	R	N	F	I	R	N	E	T	H	N	P
c-Sea	I		F	I	R		A	E	I	L	H	W	L	K	A	Q	E	R	S	
Ron	M		W	L	C			*	M	K	Q	Y	M		S	P	Q	K	Q	
	V			V	S				V	I			V		Q	D	S		T	
										M					T	N	D			
										V					G	*	N			
																	*			

EGFR	T	Q	L	M	P	F	G	C	L	L	D	Y	V	R	E	H	K	D	N	I
ErbB2	S	N	Y	L		Y	A	S	I	I	E	H	I	H	Q	N	R	G	R	L
ErbB3			I	I		L		T	M	M	*	F	L	K	D	Q		E	A	M
ErbB4			M	V		H			V	V		W	M		N			A	Q	V
			V			W									*			*	K	
			F			I													G	
			W			M														
						V														

Ret	V	E	Y	A	K	Y	G	S	L	R	G	F	L	R	E	S	R	K	V	G	P	G	Y	L	G	S	G	G	S	R	N
	I	D	F	G	R	F	A	T	I	K	A	W	I	K	D	T	K	R	I	A		A	F	I	A	T	A	A	T	K	Q
	L	*	W			W			M			Y	M		*				L				W	M							
	M								V				V						M					V							

Ret	S	S	L	D	H	P	D	E	R	A	L
	T	T	I	E			E	D	K	G	I
			M	*			*	*			M
			V								V

Figure 2E

```
Syk       M E M A E L G P L N K Y L Q Q N R H V I
Zap70     I D I G G G A   I H R F I V G K K E E L
          L * L   D I     M Q   W M N N Q   D I M
          V   V   A M     V       V I A R   * L V
                  * V               L         M
                    A               M         D
                                              *

Jak1      M E F L P S G S L K E Y L P K N K N K I
Jak2      I D Y I   Y A C I R D F I Q R H R E R L
Jak3      L * W M   T   T M   * W M N   Q S A   M
Tyk2      V     V   F     V       V       T Q   V
                    W                       D
                    L                       G
                    I                       I
                                            L
                                            *

Jak1      L E Y A P L G T V Y R E L Q K L S K F
          I D F G   I A S I F K D I N R I T R W
          M * W     M     L W   * M     M     Y
          V         V     M       V     V

Chk1      L E Y C S G G E L F D R I E P D I G M
          I D F S T A A D I W E K L D   E L A I
          M * W         * M Y *   M *   * M   L
          V               V       V       V   V

IKK-1     M E Y C S G G D L R K L L N K P E N C C G L
IKK-2     I D F S Q A A E I K R Y I Q Q F D Q S S A I
          L * W   T     * M     I M   R W *         M
          V       N       V     M V   N Y           V
                                V
                                F
                                W

DAPK      L E L V A G G E L F D F L A E K E S L
          I D I I G A A D I W E W I G D R D T I
          M * M L       * M Y * Y M   *   *   M
          V   V M         V       V           V

IRK       M E L M A H G D L K S Y L R S L R P E A E N N P G R P P P T L
          I D I I G   A E I R T F I K T I K   D G D Q Q   A K       S I
          L * M L       * M     W M     M     *   *                 M
          V   V V         V       V     V                           V

TGFbRII   T A F H A K G N L Q E Y L T R H V I
ACTRIIA   S G W   E R A S I S D F I K A N I V
ACTRIIB       Y   D       Q M T * W M S G Q L L
                  G       T V       V R K   M M
                  *
```

Figure 2F

ALK1	T	H	Y	H	E	H	G	S	L	Y	D	F	L	Q	R	Q	T	L
ALK2	S	D	F		D	M	A	T	I	F	E	Y	I	K	L	T	S	V
ALK3		E	W		*	N			M	W	*	W	M	N	C	A		I
ALK4		*				I			V				V	R	S	Y		M
ALK5						L									K	N		
ALK6						V									I	S		
						Q									M	F		
															V	W		
															T	G		

Trk-NGFR	F	E	Y	M	R	H	G	D	L	N	R	F	L	R	S	H	G	P	D	A	K	L	L	A	G	G	E	D	V	A	P
TrkB	W	D	F	I	K		A	E	I	Q	K	W	I	K	A		A		E	G	V	I	M	V	E	A	N	P	P	T	E
TrkC	Y	*	W	L				*	M			Y	M		T				*		M	M	I	I	D		Q	E	R	Q	A
				V					V				V		G						R	V	V	L	A		D	*	I	S	D
																					I			M	*		*		L	N	G
																					L			G					M	G	*
																													K		

Trk-NGFR	P	L	L
TrkB	G	E	I
TrkC	A	I	M
		M	V
		V	
		D	
		*	

DDR1	T	D	Y	M	E	N	G	D	L	N	Q	F	L	S	A	H	Q	L
DDR2	S	E	F	I	D	Q	A	E	I	Q	N	W	I	T	R		E	P
		*	W	L	*			*	M			Y	M		K		N	I
				V					V				V		G		D	V
																	*	M

ILK	T	H	W	M	P	Y	G	S	L	Y	N	V	L	H	E	G	T	N	F	V	V
	S		F	I		F	A	T	I	F	Q	I	I		D	A	S	Q	W	I	I
			Y	L		W			M	W		L	M		*				Y	L	L
				M					V			M	V							M	M

Figure 3A

Peptide	N-terminal																		C-terminal
Akt1/Raca																			
95 K014D001	Myristyl-	G	M	E	Y	A	N	G	G	E	L	F	F	H	L	S	R	E	R V F - NH2
ALK1																			
96 K048D101	Myristyl-	G	T	H	Y	H	E	H	G	S	L	Y	D	F	L	Q	R	Q	T L - NH2
Braf																			
97 K003D001	Acetyl-	K	K	K	K	K	K	G	G	S	S	L	Y	H	H	L	H	I	I E T K F - NH2
98 K003D101	Myristyl-	G	T	Q	W	S	E	G	S	S	L	Y	H	H	L	H	I	I	E T K F - NH2
c-Abl																			
99 K061D101	Myristyl-	G	T	E	F	M	T	Y	G	N	L	L	D	Y	L	R	E	C	N R Q E V - NH2
c-Met																			
100 K073D101	Myristyl-	G	L	P	Y	M	K	H	G	D	L	R	N	F	I	R	N	E	T H N P - NH2
c-Raf																			
101 K001D101	Myristyl-	G	T	Q	W	S	E	G	S	S	L	Y	K	H	L	H	V	Q	E T K F - NH2
102 K001D001	Acetyl-	S	S	L	Y	K	H	L	H	V	Q	E!	T	K	F				- NH2
c-Sea																			
103 K074D101	Myristyl-	G	L	P	Y	M	R	H	G	D	L	R	H	F	I	R	A	Q	E R S P - NH2
c-Src																			
104 K051D101	Myristyl-	G	T	E	Y	M	S	K	G	S	L	L	D	F	L	K	G	E	T G K Y L - NH2
105 K051D001	Acetyl-	G	S	L	L	D!	L	K	G	E!	T	G	K	F	L				- NH2
CDK2																			
106 K049D101	Myristyl-	G	F	E	F	L	H	Q	D	L	K	K	F	M	D	A	S	A	L T G I - NH2
107 K049D001	Acetyl-	D!	L	K	K	F	M	D!	A	S	A	L	T	G	M				- NH2
CDK4																			
108 K050D001	Acetyl-	D!	L	R	T	Y	L	D!	K	A	P	P	P	G	L				- NH2
109 K050D101	Myristyl-	G	F	E	H	V	D	Q	D	L	R	T	Y	L	D	K	A	P	P P G L - NH2
CDK6																			
110 K089D101	Myristyl-	G	F	E	H	V	D	Q	D	L	T	T	Y	L	D	K	V	P	E P G V - NH2
Chk1																			
111 K088D102	Myristyl-	G	E	Y	S	S	G	G	E	L	F	D	R	I	E	P	D	I	G M - NH2
112 K088D101	Myristyl-	G	E	Y	A	S	G	G	E	L	F	D	R	I	E	P	D	I	G M - NH2
CK IIa																			
113 K022D001	Acetyl-	K	K	K	K	K	G	G	N	N	T	D	F	K	Q	L	Y	Q	T L - NH2
114 K022D101	Myristyl-	G	F	E	H	V	N	N	T	D	F	K	Q	L	Y	Q	T	L	- NH2

Figure 3B

	Csk			
115	K058D101	Myristyl -	G T E Y M A K G S L V D Y L R S R G R S V L	- NH2
116	K058D001	Acetyl -	G S L V D! L R S R G R S V L	- NH2
	Fak			
117	K060D101	Myristyl -	G M E L S T L G E L R S F L Q V R K Y S L	- NH2
	FGFR-3			
118	K071D101	Myristyl -	G G N L R E F L R A R R P P G L E	- NH2
119	K071D001	Acetyl -	G N L R E! F L R A R R P P G L E!	- NH2
120	K071D102	Myristyl -	G V E Y A A K G N L R E F L R A R R P P G L E	- NH2
121	K071D901	Stearyl -	G S F D T S K P P E E Q L	- NH2
	Flk1			
122	K068D101	Myristyl -	G V E F S K F G N L S N F L R A K R N L F V P	- NH2
123	K068D101	Myristyl -	G G N L S N F L R A K R N L F V P	- NH2
124	K068D001	Acetyl -	G N L S N F L R A K R N L F V P	- NH2
125	K068D901	Stearyl -	G R F R Q G K D Y V G E L	- NH2
	GSK3b			
126	K018D003	Acetyl -	K K K K K K G G G V A R H Y S R A K Q T L P	- NH2
127	K018D002	Acetyl -	V A R H Y S R A K Q T L P	- NH2
128	K018D101	Myristyl -	G D Y V P E T V Y R V A R H Y S R A K Q T L	- NH2
129	K018D001	Acetyl -	R V A R H Y S R A K Q T	- NH2
	Hck			
130	K056D101	Myristyl -	G T E F M A K G S L L D F L K S D E G S K Q	- NH2
	Jak1			
131	K087D101	Myristyl -	G L E Y A P L G T V Y R E L Q K L S K F	- NH2
	IKK-1			
132	K090D101	Myristyl -	G M E Y S S G G D L R K L L N K P E N S S G L	- NH2
	IKK-2			
133	K091D101	Myristyl -	G M E Y S Q G G D L R K Y L N Q F E N S S G L	- NH2
	ILK			
134	K107D101	Myristyl -	G T H W M P Y G S L Y N V L H E G T N F V V	- NH2
135	K107D901	Stearyl -	G Y N V L H E G T N F V V	- NH2

Figure 3C

	IRK		
136	K094D101	Myristyl - G M E L M A H G D L K S Y L R S L R P	- NH2
137	K094D001	Acetyl - A Q N N P G R P P P T L	- NH2
138	K094D102	Myristyl - G L K S Y L R S L R P E A	- NH2
139	K094D103	Myristyl - G A E N N P G R P P P T L	- NH2
140	K094D104	Myristyl - G L R P E A E N N P G R P P P T L	- NH2
	Jak1		
141	K084D101	Myristyl - G M E F L P S G S L K E Y L P K N K N K I	- NH2
142	K084D102	Myristyl - G L K E Y L P K N K N K I	- NH2
	Jak2		
143	K085D102	Myristyl - G L R D Y L Q K H K E R I	- NH2
144	K085D105	Stearyl - G L R D Y L Q K H K E	- NH2
	Jak3		
145	K086D101	Myristyl - G M E Y L P S G S L R D F L Q R H R A L	- NH2
146	K086D102	Myristyl - G M E Y L P S G S L R D F L Q R H R A R L	- NH2
147	K086D103	Myristyl - G L R D F L Q R H R A R L	- NH2
	Lck		
148	K057D001	Acetyl - G S L V D! L K T P S G I K L	- NH2
149	K057D101	Myristyl - G T E Y M E N G S L V D F L K T P S G I K L	- NH2
	Lyn		
150	K055D101	Myristyl - G T E Y M A K G S L L D F L K S D E G G K V	- NH2
	MARK1		
151	K045D101	Myristyl - G M E Y A S G G E V F D Y L V A H G R M	- NH2
	PDGFR-b		
152	K064D001	Acetyl - G D! L V D! Y L H R N K H T F L	- NH2
153	K064D101	Myristyl - G T E Y S R Y G D L V D Y L H R N K H T F L	- NH2
	PKCb		
154	K008D101	Myristyl - G M E Y V N G G D L M Y H I Q Q V G R F	- NH2
155	K008D001	Acetyl - K K K K K K G G D L M Y H I Q Q V G R F	- NH2
	Plk		
156	K035D001	Acetyl - R S L L E! L H K R R K A	- NH2
157	K035D101	Myristyl - G R S L L E! L H K R R K A	- NH2

Figure 3D

158	K035D102	Myristyl -	G L E L S R R R S L L E L H K R R K A L	- NH2
	Ret			
159	K080D101	Myristyl -	G V E Y A K Y G S L R G F L R E S R K V G P	- NH2
160	K080D001	Acetyl -	G S L R G F L R E S R K V G P	- NH2
	Ron			
161	K075D101	Myristyl -	G L P Y M C H G D L L Q F I R S P Q R N P	- NH2
	SNK			
162	K038D101	Myristyl -	G L E Y S S R R S M A H I L K A R K V L	- NH2
	Syk			
163	K082D101	Myristyl -	G M E M A E L G P L N K Y L Q Q N R H V	- NH2
	TGFbRII			
164	K093D101	Myristyl -	G T A F H A K G N L Q E Y L T R H V I	- NH2
	TrkB			
165	K102D101	Myristyl -	G F E Y M K H G D L N K F L R A H G P D A V L M A	- NH2
166	K102D106	Myristyl -	G L R A H G P D A V L M A	- NH2
167	K102D107	Myristyl -	G L R A H G P D A V L	- NH2
168	K102D108	Myristyl -	G L N F K L R A H G P D A	- NH2
169	K102D109	Myristyl -	G F K L R A H G P D A V L	- NH2
	Zap70			
170	K083D101	Myristyl -	G M E M A G G G P L H K F L V G K R E E I	- NH2

K:\RWAGNER\CMCC\679\FIGURES

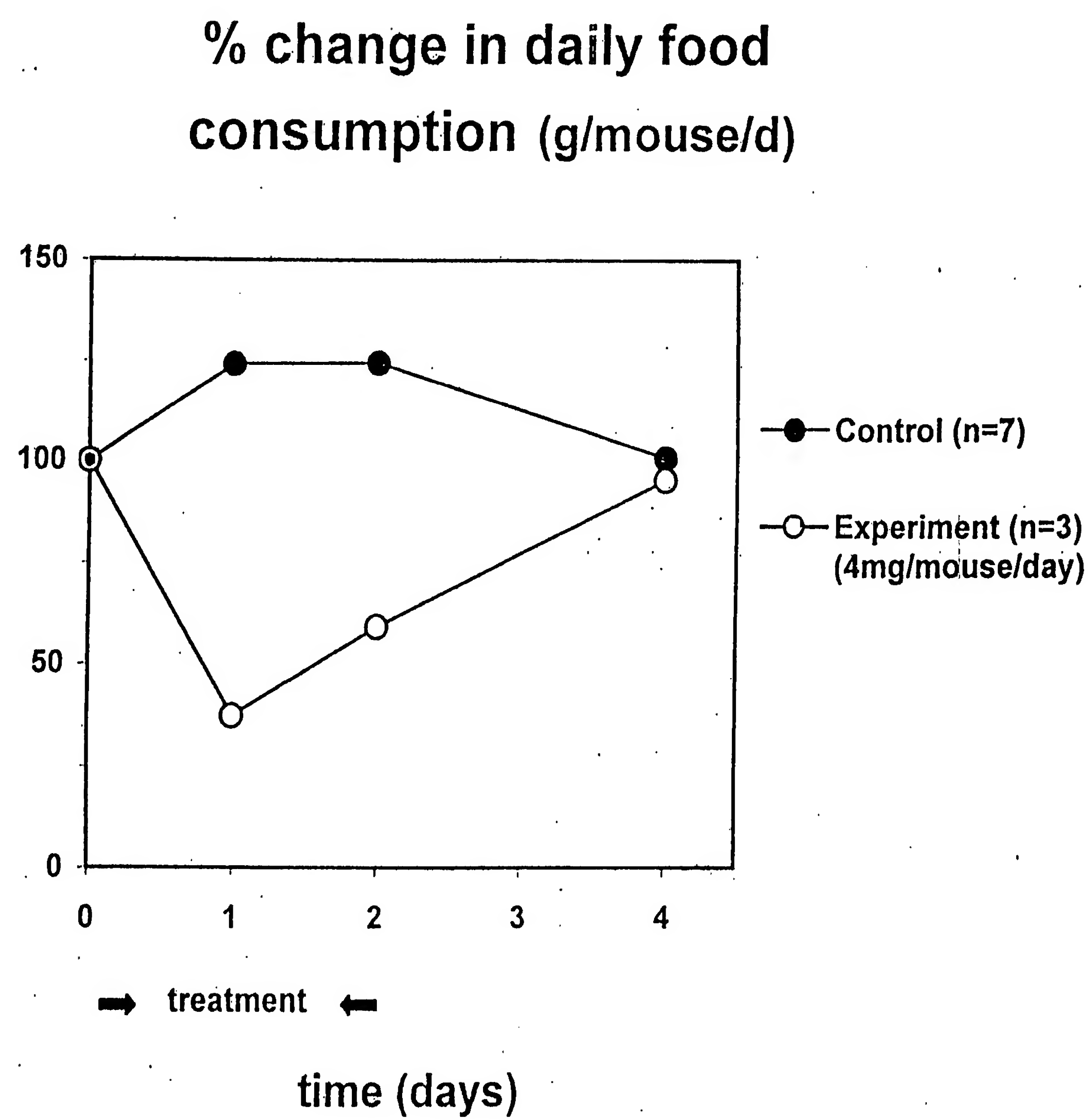
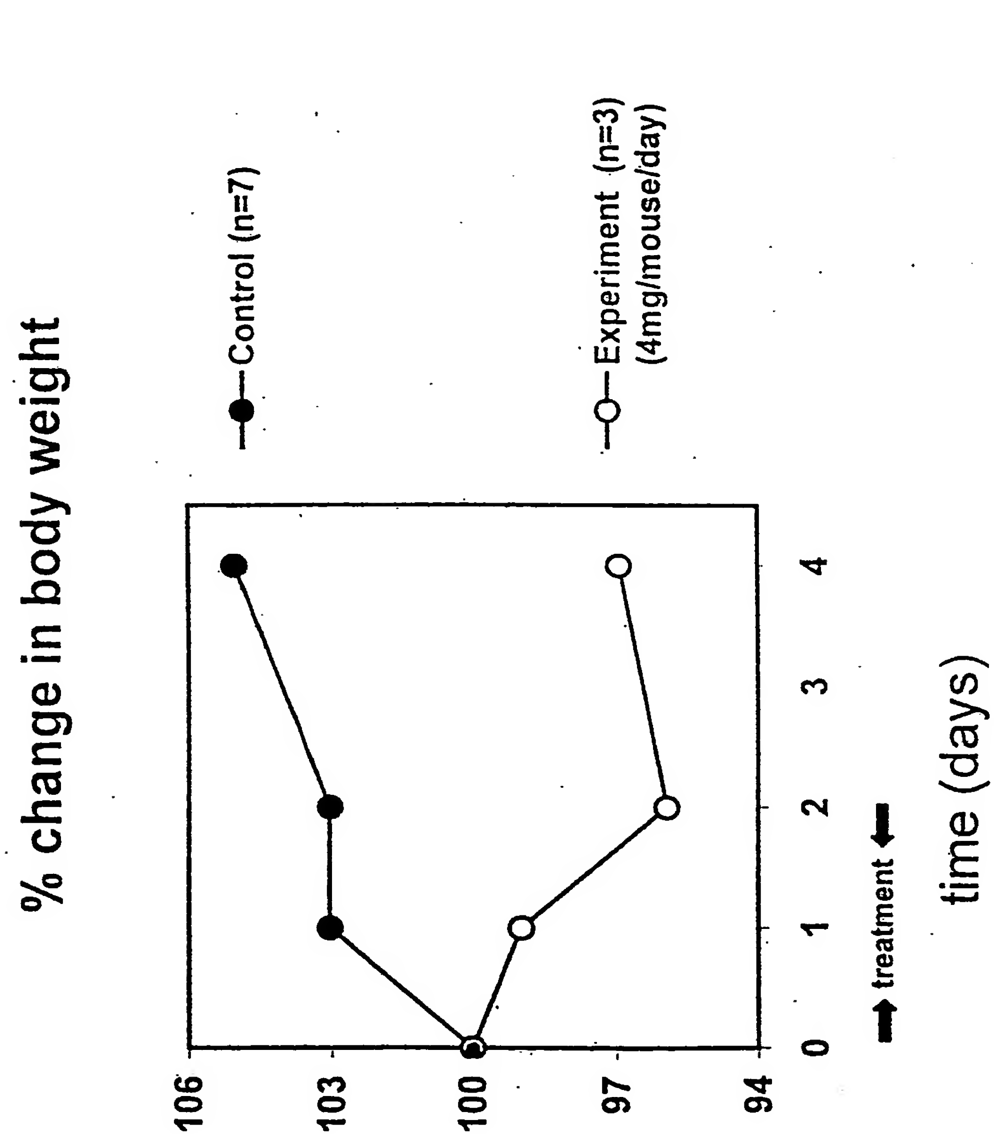

% change in daily food
consumption (g/mouse/d)
150
100
50
0
0
1
2
3
4
Control (n=7)
Experiment (n=3)
(4mg/mouse/day)
treatment
time (days)

Figure 4



% change in body weight
Control (n=7)
Experiment (n=3)
(4mg/mouse/day)
106
103
100
97
94
0
1
2
3
4
treatment
time (days)

Figure 5

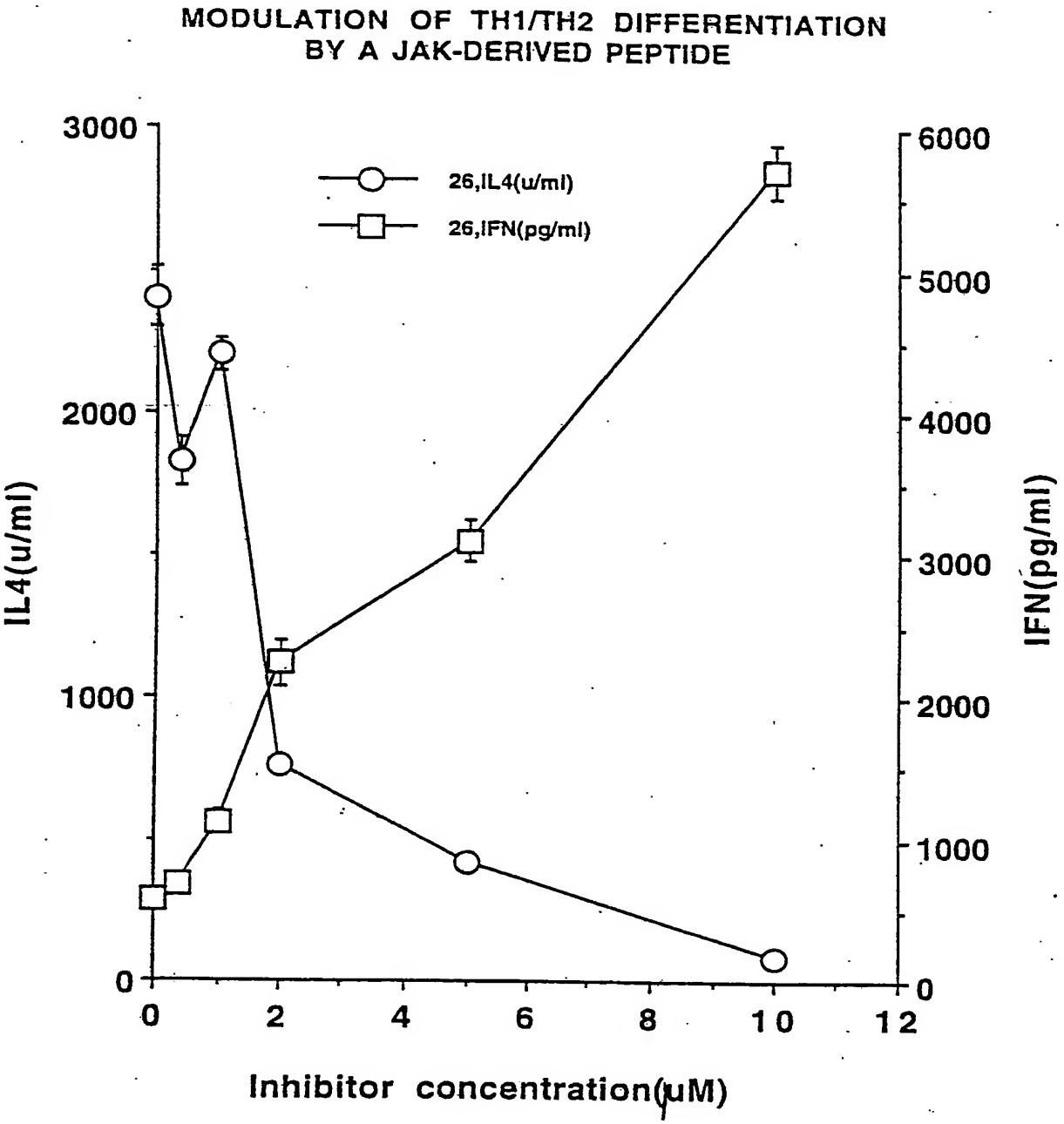

MODULATION OF TH1/TH2 DIFFERENTIATION
BY A JAK-DERIVED PEPTIDE
26,IL4(u/ml)
26,IFN(pg/ml)
IL4(u/ml)
IFN(pg/ml)
Inhibitor concentration(μM)
3000
2000
1000
0
6000
5000
4000
3000
2000
1000
0
0
2
4
6
8
10
12

Figure 6

Fig. 7